The Journal of Research on the Lepidoptera

## Volume 44: 107-108

ISSN 0022-4324 (print) ISSN 2156-5457 (online)

## **BOOK REVIEW**

## Guia dos Sphingidae da Serra dos Órgãos, sudeste do Brasil. A guide to the hawkmoths of the Serra dos Orgaos, south-eastern Brazil by Alan Martin, Alexandre Soares and Jorge Bizarro, 2011

REGUA Publications, Oxford, 143 pp. Avaliable from NHBS, UK (www.nhbs.com). ISBN: 9780956829108. Price: £ 24.99 (approx. US\$ 41 or € 28).

Sphingidae, or hawkmoths, arguably are the globally best known representatives of (mostly) nocturnal moths. They are taxonomically well known, and the wealth of biogeographical as well as ecological information available for them render hawkmoths ideal subjects of evolutionary, macro-ecological and biodiversity studies. Moreover, many hawkmoths play important roles as pollinators of flowering plants and a small number also achieve, at least occasionally, importance as agricultural or silvicultural pests. As with most insect groups, the Sphingidae attain maximum species richness in the tropics, yet species identifications of tropical hawkmoths are still hampered by the lack of affordable regional guides for many areas within South America or tropical Africa.

This new guide covers 110 Sphingidae species recorded thus far from a rather small subarea of the state of Rio de Janeiro in south-eastern Brazil. The study region harbours substantial remnants of the formerly extensive Mata Atlantica forest, a global biodiversity hotspot of high conservation concern. This hotspot score of the study region is also supported by the fact that almost 50 % of all hawkmoths known to occur in Brazil have been recorded from this small area. The book starts with four short introductory chapters (bilingual in Portuguese and English). These are followed by detailed accounts (in English only) of the 110 observed plus four more suspected hawkmoth species of the area. On 37 photographic color plates spread specimens (both sexes of all species) are depicted in dorsal and ventral view. Additional

Received: 16 September 2011

10 color plates contain photographs of living moths attracted to light sources. While the former are more useful for identification and comparison, they suffer from the fact that quite a number of specimens show faded colors. In contrast, coloration of the living specimens is more intense, and therefore it is really helpful to have them both available in the book. Appendices on the English-born naturalist Henry R. Pearson (who started research on hawkmoths in the region and collected many of the figured specimens), on the reserve REGUA, on locality details of all figured specimens, on larval hostplant affiliations, and species lists broken down to localities and months of the year complement the book.

This is a useful addition to the recent literature on Neotropical moths. A minor draw-back is the lack of scale bars included with the figures - it is thus impossible to get an idea about body sizes directly from the plates (all moths are figured in the same size, but fore wing length data are provided in the species accounts). For the international reader it would have been more rewarding to cover the entire hawkmoth fauna of Brazil, or at least of the whole state of Rio de Janeiro, instead of focusing on such a small arbitrarily limited area. These are, however, minor criticisms. Relative to another recent regional faunal treatment from the Neotropical region (Ecuador, 142 of 172 known species figured in color: Guevara et al. 2002) the new guide compares favorably with its more informative text, higher quality of color plates, the inclusion of host-plant data, and the more modest price.

Overall, this book can be recommended to every lepidopterist with an interest in hawkmoths from the southern half of South America. Many widespread Neotropical species are covered, but the narrow regional restriction somewhat reduces the versatility of the book for readers with a broader interest, e.g. extending into Amazonian or Andean ecosystems. Nevertheless, guides like this are most needed to stimulate further research in

Copyright: This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License. To view a copy of this license, visit http://creativecommons.org/ licenses/by-nc-nd/3.0/ or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California, 94105, USA.

the documentation and understanding of tropical moth biodiversity. It is hoped this volume will play its role in that regard.

## LITERATURE CITED

GUEVARA, D., A. IORIO, F. PIŇAS RUBIO & G. ONORE. 2002. Mariposas

del Ecuador (Continental y Galápagos): Volume 17A: Sphingidae. Museo de Zoología, Pontificia Universidad Católica del Ecuador, Quito.

KONRAD FIEDLER, Department of Animal Biodiversity, University of Vienna, Austria. *konrad.fiedler@univie.ac.at*